

ForeignExch Types Net Cost (bp) Summary

ForeignExch Types	Q3 '05	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	Q3 '07	Q4 '07	Q1 '08	Q2 '08	Q3 '08	Q4 '08	Q1 '09	Q2 '09
TREASURY INTERNAL	-26.41	-9.43	-8.44	-30.73	-11.79	-17.07	-10.32	-15.01	-18.99	-19.99	-25.14	-20.86	-22.13	-34.22	-39	-38.98
EXTERNAL CONTRACT	-2.82	3.83	1.22	-1.34	-2.16	-1.48	-0.27	-1.17	-1.62	-3.03	-5.5	-5.98	-0.5	-0.79	5.59	-3.75
TREASURY EXTERNAL CONTRACT	-4.83	-6.6	-5.53	-3.2	-2.64	-3.39	-4.04	-1.48	-5.01	-2.54	-3.9	-5.53	-6.44	7.87	-11.18	-4.34
INTERNAL CONTRACT	-7.47	-11.48	-15.08	-18.22	-11.15	-11.26	-3.84	-6.48	-12.06	-5.42	-24.48	-15.76	-2.69	-15.68	-0.04	-45.78
LONDON CONTRACT	-9.69	-14.06	-13.81	-6.01	-5.7	-6.81	-4.28	-6.07	-4.17	2.1	3.22	-5.81	-3.46	1.81	-10.63	-8.49
LONDON TREASURY	-192.18						7.79			-16.72	-6.64	-16.8	-17.18		-7.75	-64.75
C				-41.79				59.94								

ForeignExch Type (TREASURY INTERNAL CONTRACT) Results

	Q3 '05	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	Q3 '07	Q4 '07	Q1 '08	Q2 '08	Q3 '08	Q4 '08	Q1 '09	Q2 '09
Market Impact (bp)	-24.73	-9.64	-7.66	-29.37	-11.94	-16.61	-10.05	-14.69	-18.96	-20.19	-24.42	-21.14	-20.96	-33.26	-37.83	-38.46
Inst'l Peer Universe Mkt Impact (bp)	1.68	-0.2	0.79	1.36	-0.15	0.46	0.27	0.32	0.04	-0.21	0.73	-0.28	1.17	0.95	1.17	0.51
Net Cost/Benefit (bp)	-26.41	-9.43	-8.44	-30.73	-11.79	-17.07	-10.32	-15.01	-18.99	-19.99	-25.14	-20.86	-22.13	-34.22	-39	-38.98
Total Cost/Benefit (000's)	(\$831)	(\$86)	(\$98)	(\$549)	(\$145)	(\$112)	(\$134)	(\$261)	(\$412)	(\$1,178)	(\$1,086)	(\$2,152)	(\$1,987)	(\$2,714)	(\$2,316)	(\$4,393)
RPM Universe Ranking	5%	39%	36%	18%	31%	26%	31%	22%	26%	21%	21%	25%	25%	26%	21%	19%
Quartile Ranking	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Universe Volatility	0.19%	0.13%	0.16%	0.15%	0.12%	0.10%	0.13%	0.08%	0.18%	0.15%	0.23%	0.23%	0.29%	0.55%	0.42%	0.35%
Universe Market Differential	0.05%	0.03%	0.04%	0.05%	0.04%	0.03%	0.14%	0.03%	0.06%	0.05%	0.05%	0.07%	0.08%	0.16%	0.11%	0.09%
Universe Liquidity Factor	69%	81%	77%	73%	74%	73%	66%	77%	74%	70%	85%	82%	80%	83%	86%	88%
Cost/Benefit Contribution Factor	-67.43%	-26.21%	-24.96%	-52.18%	-26.53%	-21.34%	-31.94%	-43.71%	-42.19%	-67.05%	-45.56%	-52.63%	-76.25%	-94.07%	-78.90%	-84.04%
Principal Traded (000's)	\$314,818	\$91,117	\$116,343	\$178,704	\$123,099	\$65,568	\$130,068	\$173,544	\$217,048	\$589,250	\$431,715	\$1,031,504	\$897,843	\$793,189	\$593,782	\$1,126,935
Number Trades	271	455	317	629	530	459	382	638	549	1,576	1,533	2,299	2,130	2,329	1,956	2,919

Annual Vol\$483,714

Annual Vol\$1,109,910

Annual Vol\$3,154,251

Q3 '09	Q4 '09	Q1 '10	Rolling 19 Quarters	GTA Factor	Univ Volatility	Univ Market Diff	Univ Liqdt Factor	Cost/ Benefit Contrib.	Total Cost/ Benefit (000's)	Principal Traded (000's)	Num. Trades
-29.35	-28.53	-22.83	-27.11	14.36	0.22%	0.07%	79%	-71.29%	(\$26,225)	\$9,675,162	25,405
-1.36	-2.48	-6.78	-1.94	44.55	0.22%	0.04%	89%	-10.91%	(\$4,012)	\$20,715,958	17,225
-0.99	-4.71	-4.77	-3.56	45.27	0.21%	0.05%	89%	-9.47%	(\$3,483)	\$9,790,821	13,193
-48.82	-28.51	-41.48	-13.33	46.7	0.21%	0.09%	17%	-6.59%	(\$2,425)	\$1,818,552	2,524
-7.18	-10.6	-4.2	-4.49	49.18	0.23%	0.07%	74%	-1.64%	(\$603)	\$1,342,475	2,468
29.32	-30		-30.96	49.96	0.33%	0.09%	90%	-0.09%	(\$32)	\$10,250	214
			-30.38	49.99	0.18%	0.07%	52%	-0.02%	(\$7)	\$2,247	2

(\$36,787)
\$43,355,465
\$61,031

-0.0008485

Q3 '09	Q4 '09	Q1 '10	Rolling 19 Quarters
-28.81	-28.18	-22.05	-26.55
0.54	0.35	0.79	0.56
-29.35	-28.53	-22.83	-27.11
(\$3,749)	(\$2,726)	(\$1,296)	(\$26,225)
18%	18%	27%	22%
4	4	4	4
0.24%	0.26%	0.21%	0.22%
0.07%	0.06%	0.05%	0.07%
86%	86%	85%	79%
-88.17%	-80.22%	-44.55%	-71.29%
\$1,277,264	\$955,579	\$567,793	\$9,675,162
2,477	2,271	1,685	25,405

Annual Vol
\$3,953,560

Annual Cost

Annual BPs

(\$13,184)

(33.35)

Q3 '09	Q4 '09	Q1 '10	Rolling 19 Quarters
-28.81	-28.18	-22.05	-26.55
-1.36	-2.48	-6.78	-1.94
-0.99	-4.71	-4.77	-3.56

27.45	25.70	15.27	24.61
(\$3,506.09)	(\$2,455.84)	(\$867.02)	(\$23,810.57)
27.82	23.47	17.28	22.99
(\$3,553.35)	(\$2,242.74)	(\$981.15)	(\$22,243.20)

Annual Cost
Annual BPs

(\$904)
(18.69)

Annual Cost
Annual BPs

(\$1,985)
(17.88)

Annual Cost
Annual BPs

(\$7,939)
(25.17)

Staff Analysis of additional cost for Execution Type = Treasury Internal Contract.
Assumes External Contract and Treasury External Contract is the benchmark.

	Q3 '05	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	Q3 '07	Q4 '07	Q1 '08	Q2 '08	Q3 '08	Q4 '08	Q1 '09	Q2 '09
TREASURY INTERNAL CONTRACT	-24.73	-9.64	-7.66	-29.37	-11.94	-16.61	-10.05	-14.69	-18.96	-20.19	-24.42	-21.14	-20.96	-33.26	-37.83	-38.46
EXTERNAL CONTRACT	-2.82	3.83	1.22	-1.34	-2.16	-1.48	-0.27	-1.17	-1.62	-3.03	-5.5	-5.98	-0.5	-0.79	5.59	-3.75
TREASURY EXTERNAL CONTRACT	-4.83	-6.6	-5.53	-3.2	-2.64	-3.39	-4.04	-1.48	-5.01	-2.54	-3.9	-5.53	-6.44	7.87	-11.18	-4.34

Bchmk against External Contract

Net cost/benefit (bps)	21.91	13.47	8.88	28.03	9.78	15.13	9.78	13.52	17.34	17.16	18.92	15.16	20.46	32.47	43.42	34.71
Total Cost/Benefit (000's)	(\$689.77)	(\$122.73)	(\$103.31)	(\$500.91)	(\$120.39)	(\$99.20)	(\$127.21)	(\$234.63)	(\$376.36)	(\$1,011.15)	(\$816.80)	(\$1,563.76)	(\$1,836.99)	(\$2,575.48)	(\$2,578.20)	(\$3,911.59)

Bchmk against Treasury External Contract

Net cost/benefit (bps)	19.90	3.04	2.13	26.17	9.30	13.22	6.01	13.21	13.95	17.65	20.52	15.61	14.52	41.13	26.65	34.12
Total Cost/Benefit (000's)	(\$626.49)	(\$27.70)	(\$24.78)	(\$467.67)	(\$114.48)	(\$86.68)	(\$78.17)	(\$229.25)	(\$302.78)	(\$1,040.03)	(\$885.88)	(\$1,610.18)	(\$1,303.67)	(\$3,262.39)	(\$1,582.43)	(\$3,845.10)

SBA Staff Notes:

Treasury Internal Contract (T): **Standing Instruction Trade.** Input into CMS (Custody Management System?) and then sent to PGH Treasury (Pittsburgh) for execution

External Contract (E): Executed by a 3rd party.

Treasury External Contract (X): An FX placed directly with the PGH desk

Internal FX Contract (I): This is an internal FX sent to the sub-custodian for execution

London Contract (L): An FX placed directly with the London Desk

London Treasury Contract (N): **Standing Instruction Trade.** Input into CMS and then sent to the London Treasury for execution

C: This is a **Standing Instruction Trade.** Input into CMS and sent to CIBC Treasury for execution.

Additional Cost of Treasury Internal Contract vs Stated Benchmark

Benchmark	Additional Cost	
	Bps	USD (000s)
Inst'l Peer Universe Mkt Impact	-27.11	(26,225.00)
External Contract	-24.61	(23,810.57)
Treasury External Contract	-22.99	(22,243.20)